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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/614,151 | 07/08/2003 | Chung-Yih Wang | 33080/US/2 | 7681 |

38598 7590 10/06/2008

ANDREWS KURTH LLP
1350 I STREET, N.W.
SUITE 1100
WASHINGTON, DC 20005

| EXAMINER | |
|---|---|
| SMARTH, GERALD A | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2446 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 10/06/2008 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/614,151 | WANG ET AL. | |
| | Examiner | Art Unit | |
| | GERALD SMARTH | 2146 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *19 November 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07/08/2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

**DETAILED ACTION**

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: Remark date 11/19/07.

2. Claims 1-42 are presented for examination. Claims 1-15 are currently being cancelled. Claims 1, 13, 21, 22, 31, 39 are independent claims. The remaining claims are dependent on claims 1, 13, 21, 22, 31, 39.

3. The Rejections are respectfully maintained and reproduced infra for application's convenience.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 22-30, & 31-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The preamble of the claims recites "An apparatus" which does not include hardware. As such, the claims are directed to software per se which is non-functional descriptive material and non-statutory.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-7, 9, 10,13-18, 21-28, 31-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banavar (US 7050432). In view of Foster (U.S 7042877),

Regarding claim 1, Foster teaches a method for routing packets in a network for use in providing alert services, comprising: receiving a packet having a header section and a payload section, the payload section including information relating to a video clip for a particular camera, the information including a subject and an attribute; retrieving subscriptions based on the subject; inspecting the payload section of the packet in a network core for use in determining how to route the packet to subscribers to information from the particular camera; comprising applying the attribute to the subscriptions; and selectively routing the packet based upon the inspecting. ***(Banavar discloses content-based publish/subscribe systems improve the degree of decoupling between publishers and subscribers. In content-based***

***publish/subscribe systems, subscriptions are specified in terms of predicates on the posted data, rather than in terms of subject identifiers supplied by the publisher. One example of a content-based publish/subscribe system is described in co-pending U.S. patent application Ser. No. 08/975,280, entitled "Method And System For Matching Consumers To Events," Astley et al., which is hereby incorporated herein by reference in its entirety. The examples described herein are with reference to a content-based subscription system. However, these are only examples. The present invention can be employed with other types of systems without departing from the spirit of the present invention. In one embodiment of the invention, each router 108 of network 100 (FIG. 1) has associated therewith a spanning tree, which lays out the best path (according to some criterion, such as latency) from the router to each client 101. In this embodiment, it is assumed that routers agree on a common criterion for measuring distance between nodes in the network. There may in fact be multiple spanning trees. For example, alternative spanning trees may specify either backup routes, or peak load routes. Herein, it is assumed that one spanning tree is in effect for the routing of any particular message; Column 5 lines 49-Column 6 line 8)***

Banavar does not explicitly teach the payload section including information relating to a video clip for a particular camera.

However Foster does teach the payload section including information relating to a video clip for a particular camera. **(Foster discloses: other information from the**

**deconstructed data from a particular camera data frame, such as a type of data (eg. Video data), column 13 line 5-16. Foster states many such data communication processing techniques include various common steps, such as deconstructing received data frames or packets based on the network protocols used to encode the data in order to extract various relevant header and payload information, Column 3 line 8-13, column 13 line 5-16, figures 2A and 2B).**

It would be obvious to a person of ordinary skill in the art at the time of the invention to modify the message logging for reliable multicasting across a routing network of Banavar to include a method of routing packets which include video data as taught by Foster. One of ordinary skill in the art would have been motivated to make this modification in order to have the messaging technique of Banavar to include Foster's integrated analysis of incoming data transmission because it provides a more dynamic way of transmitting information and data. *Foster discloses in addition to inter-vendor problems that exist in current EDN architectures, it is often difficult for even a single device such as an edge switch to forward data to appropriate destinations in a secure manner, particularly with any guarantees as to the Quality Of Service ("QOS") of the transmissions. For example, current architectures typically assign one or more network addresses to each node in a network (e.g., logical network addresses such as IP addresses and/or physical network addresses such as Media Access Control ("MAC") addresses), and network routing and switching devices use the network addresses of a destination node to route transmissions of data from a source node to that destination node.; Page 3 lines 31-42.*

Therefore, it would be obvious to combine Banavar with Foster to arrive to limitations in 1.

Regarding claim 2, Banavar in view of Foster taught the method of claim 1, as described above. Foster further teaches wherein the inspecting step includes determining whether information in the payload section matches content predicate information in a structure associating the content predicate information with corresponding network destinations. **(Foster discloses in some embodiments, content type classification content type classification information from step 420 and /or content analysis information from step 425 may be used to assist in the destination selection process, such as to select a destination optimized for the specific content of the received data frame or based on information determined during the analysis of the content. Column 18 line 20)**

Regarding claim 3, Banavar in view of Foster taught the method of claim 1, as described above. Foster further teaches, including performing the inspecting step at a router in the network core. **(Foster discloses the routine receives indications of incoming data frames in one or more data link layer network protocols, deconstructs those frames to obtain payload and header information in a manner specific to the data link layer network protocol in which the data frames are encoded, analyzes the deconstructed data frames are encoded, analyzes the deconstructed data frame information in various ways, and creates and transmits a corresponding data frame encoded in a different data link layer network protocol for forwarding if appropriate. Column 17 line 51)**

Regarding claim 4, Banavar in view of Foster taught the method of claim 1, as described above. Foster further teaches wherein the inspecting step includes applying a filter to information in the payload section. **(Foster discloses the routine then continues to step 425 to analyze the payload of the data frame for various types of required or prohibited content, and may in some embodiments use content type classification information from step 420 as part of the analysis. In some embodiments, if prohibited content is detected and/or required content is not present, the content analysis may remove, replace, or add such content. Column 18 line 4)**

Regarding claim 5, Banavar in view of Foster taught the method of claim 4, as described above. Foster further teaches including propagating the filter to a router in the network for use in performing the inspecting. **(Foster discloses for example the content based routing of data communications(e.g. by analyzing data communications at some or all of the layers 4-7 of the ISO networking model, such as to assist n determining appropriate destinations. Column 5 line 12).**

Regarding claim 6, Banavar in view of Foster taught the method of claim 1, as described above. Foster further teaches including programming a router in the network for performing the receiving (fig. 4 element 405), inspecting (fig.4 element 445 and 460), and routing steps( fig. 4 element 415).

Regarding claim 7, Banavar in view of Foster taught method of claim 1, as described above. Foster further teaches wherein the inspecting step includes inspecting attributes for use in determining how to route the packet. **(Foster discloses**

**in some embodiments, if prohibited content is detected and/or required content is not present, the content is detected and/or required a content analysis may remove, replace, or add such content. Column 18 line 9)**

Regarding claim 9, Banavar in view of Foster taught the method of claim 1, as described above. Foster further teaches including performing the inspecting step in a local-area network. **(Foster discloses in this illustrated embodiment, the Ethernet data frame is being routed to an MPEX that connects two or more distinct Local Area Networks ("LANs"). Column 10 line 54)**

Regarding claim 10, Banavar in view of Foster taught the method of claim 1, as described above. Foster further teaches including performing the inspecting step at an internet service provider location. **(Foster discloses the MPEX may be connected to other devices that are not illustrated, including one or more additional networks(e.g., that are part of the Internet). In addition, the MPEX could be part of an EDN, such as by part of the EDN. Column 15 line 48)**

Regarding claim 13, Banavar teaches a method for routing messages in a network providing alert services, comprising: receiving a message having a header section, at least one subject, and at least one attribute, the attribute relating to a video clip from a particular camera; retrieving the subject and the attribute from the message; retrieving a subscription based upon the subject; and applying the attribute to the subscription in a network core in order to determine how to route the message to a subscriber to information from the particular camera. ***(Banavar discloses content-based publish/subscribe systems improve the degree of decoupling between publishers***

***and subscribers. In content-based publish/subscribe systems, subscriptions are specified in terms of predicates on the posted data, rather than in terms of subject identifiers supplied by the publisher. One example of a content-based publish/subscribe system is described in co-pending U.S. patent application Ser. No. 08/975,280, entitled "Method And System For Matching Consumers To Events," Astley et al., which is hereby incorporated herein by reference in its entirety. The examples described herein are with reference to a content-based subscription system. However, these are only examples. The present invention can be employed with other types of systems without departing from the spirit of the present invention. In one embodiment of the invention, each router 108 of network 100 (FIG. 1) has associated therewith a spanning tree, which lays out the best path (according to some criterion, such as latency) from the router to each client 101. In this embodiment, it is assumed that routers agree on a common criterion for measuring distance between nodes in the network. There may in fact be multiple spanning trees. For example, alternative spanning trees may specify either backup routes, or peak load routes. Herein, it is assumed that one spanning tree is in effect for the routing of any particular message; Column 5 lines 49-Column 6 line 8)***

Banavar does not explicitly teach the the attribute relating to a video clip from a particular camera.

However Foster does teach the attribute relating to a video clip from a particular camera;. **(Foster discloses: other information from the deconstructed**

**data from a particular camera data frame, such as a type of data (eg. Video data), column 13 line 5-16. Foster states many such data communication processing techniques include various common steps, such as deconstructing received data frames or packets based on the network protocols used to encode the data in order to extract various relevant header and payload information, Column 3 line 8-13, column 13 line 5-16, figures 2A and 2B).**

It would be obvious to a person of ordinary skill in the art at the time of the invention to modify the message logging for reliable multicasting across a routing network of Banavar to include a method of routing packets which include video data as taught by Foster. One of ordinary skill in the art would have been motivated to make this modification in order to have the messaging technique of Banavar to include Foster's integrated analysis of incoming data transmission because it provides a more dynamic way of transmitting information and data. *Foster discloses in addition to inter-vendor problems that exist in current EDN architectures, it is often difficult for even a single device such as an edge switch to forward data to appropriate destinations in a secure manner, particularly with any guarantees as to the Quality Of Service ("QOS") of the transmissions. For example, current architectures typically assign one or more network addresses to each node in a network (e.g., logical network addresses such as IP addresses and/or physical network addresses such as Media Access Control ("MAC") addresses), and network routing and switching devices use the network addresses of a destination node to route transmissions of data from a source node to that destination node.; Page 3 lines 31-42.*

Therefore, it would be obvious to combine Banavar with Foster to arrive to limitations in 13.

Regarding claim 14, Banavar in view of Foster taught the method of claim 13, as described above. Banavar further teaches wherein the retrieving the subscription step includes retrieving a filter corresponding with the subscription. ***(Banavar discloses the present invention achieves reliability of routed messages by saving messages to persistent storage within the router network and retrieving and redelivering the message whenever there is a failure in the network. Publishers and subscribers that need reliability of messages may specify a quality of service parameter, e.g., "uniform delivery". Uniform delivery is provided for ensuring delivery of a message to all active subscribers notwithstanding failure in the network, e.g., the routers, or the links. Special routers in the router network 300 are designated logging nodes or loggers 310 and support the ability to log messages to stable storage. When there is at least one subscriber needing logging, the routing algorithm ensures that messages are routed to a logger. When reliable delivery is required by at least one publisher or subscriber, the routing protocol incorporates message logging in accordance with the principles of the present invention; Column 6 lines 51- Column 7 line 5)***

Regarding claim 15, Banavar in view of Foster taught the method of claim 13, as described above. Banavar further teaches including routing the message if the attribute satisfies the subscription. ***(Banavar discloses again, as used herein, "uniform delivery" comprises a system guarantee that subscribers who have requested***

***uniform delivery receive the message only if all other subscribers requesting uniform delivery also receive the message. Otherwise, the message is not forwarded to any subscriber requesting the uniform delivery. Either every subscriber receives the published message or no subscriber of uniform delivery receives the published message; Column 8 lines 63-Column 9 lines 6)***

Regarding claim 16, Banavar in view of Foster taught the method of claim 13, as described above. Banavar further teaches including discarding the message if the attribute does not satisfy the subscription***(Banavar discloses again, as used herein, "uniform delivery" comprises a system guarantee that subscribers who have requested uniform delivery receive the message only if all other subscribers requesting uniform delivery also receive the message. Otherwise, the message is not forwarded to any subscriber requesting the uniform delivery. Either every subscriber receives the published message or no subscriber of uniform delivery receives the published message; Column 8 lines 63-Column 9 lines 6)***

Regarding claim 17, Banavar in view of Foster taught the method of claim 13, as described above. Banavar teaches further including: retrieving a plurality of filters corresponding with a plurality of subscriptions; retrieving a plurality of attributes from the message; applying each of the attributes to each of the filters to determine if any of the corresponding subscriptions are satisfied; and selectively routing the message based upon whether any of the subscriptions are satisfied. ***(Banavar discloses FIG. 7 depicts one embodiment of phase one message routing processing in accordance with the present invention. This processing is implemented at each***

***node of the network. At a given node, a published message is received 700 and recorded into the node's message table 402 (FIG. 4) using the message id and source node information provided with the message 710. The node's content routing computation 404 (FIG. 4) next determines neighboring node routing information which is also stored into the message table 720. Again, this computation is based on data content of the message when employing a routing system such as described in the initially-incorporated patent application. Column 8 lines 44-55 and lines 56-67)***

Regarding claim 18, Banavar in view of Foster taught the method of claim 13, further including performing the applying step at a router in the network core. ***(Banavar discloses In addition to the spanning tree associated with each router, each router has a routing table. The routing table includes an entry for each client computer in the network. Each entry of the routing table associates a client address with the identifier of the network link constituting the next segment on the path in the spanning tree from the router to the client. For a router with d network links, each such link identifier is an integer between 1 and d. For instance, the client having address 101a has a corresponding link identifier of 3 (see FIG. 2); Column 6 line 25-33)***

Regarding claim 21, Banavar teaches a method for routing packets in a network for use in providing alert services, comprising: receiving a packet having a header section and a payload section, the payload section including information relating to an event for a particular alert service; the information including a subject and an attribute;

inspecting the payload section of the packet in a network core for use in determining how to route the packet to subscribers to information for the alert service; and selectively routing the packet based upon the inspecting, comprising: retrieving a subscription based on the subject, applying the attribute to the subscription to determine a match and routing the packet if the subscription and the attribute match. ***(Banavar discloses content-based publish/subscribe systems improve the degree of decoupling between publishers and subscribers. In content-based publish/subscribe systems, subscriptions are specified in terms of predicates on the posted data, rather than in terms of subject identifiers supplied by the publisher. One example of a content-based publish/subscribe system is described in co-pending U.S. patent application Ser. No. 08/975,280, entitled "Method And System For Matching Consumers To Events," Astley et al., which is hereby incorporated herein by reference in its entirety. The examples described herein are with reference to a content-based subscription system. However, these are only examples. The present invention can be employed with other types of systems without departing from the spirit of the present invention. In one embodiment of the invention, each router 108 of network 100 (FIG. 1) has associated therewith a spanning tree, which lays out the best path (according to some criterion, such as latency) from the router to each client 101. In this embodiment, it is assumed that routers agree on a common criterion for measuring distance between nodes in the network. There may in fact be multiple spanning trees. For example, alternative spanning trees may specify either***

***backup routes, or peak load routes. Herein, it is assumed that one spanning tree is in effect for the routing of any particular message; Column 5 lines 49-Column 6 line 8)***

Regarding claim 22, Banavar teaches an apparatus for routing packets in a network for use in providing alert services, comprising: a receive module for receiving a packet having a header section and a payload section, the payload section including information relating to a video clip from a particular camera; the information including a subject and an attribute; an inspect module for inspecting the payload section of the packet in a network core for use in determining how to route the packet to subscribers to information from the particular camera; and a route module for selectively routing the packet based upon the inspecting, wherein the inspecting module and the route module operate to retrieve a subscription based on the subject, apply the attribute to the subscription based on the subject, apply the attribute to the subscription to determine a match, and route the packet if the subscription and the attribute match. ***(Banavar discloses content-based publish/subscribe systems improve the degree of decoupling between publishers and subscribers. In content-based publish/subscribe systems, subscriptions are specified in terms of predicates on the posted data, rather than in terms of subject identifiers supplied by the publisher. One example of a content-based publish/subscribe system is described in co-pending U.S. patent application Ser. No. 08/975,280, entitled "Method And System For Matching Consumers To Events," Astley et al., which is***

***hereby incorporated herein by reference in its entirety. The examples described herein are with reference to a content-based subscription system. However, these are only examples. The present invention can be employed with other types of systems without departing from the spirit of the present invention. In one embodiment of the invention, each router 108 of network 100 (FIG. 1) has associated therewith a spanning tree, which lays out the best path (according to some criterion, such as latency) from the router to each client 101. In this embodiment, it is assumed that routers agree on a common criterion for measuring distance between nodes in the network. There may in fact be multiple spanning trees. For example, alternative spanning trees may specify either backup routes, or peak load routes. Herein, it is assumed that one spanning tree is in effect for the routing of any particular message; Column 5 lines 49-Column 6 line 8)***

Banavar does not explicitly teach the payload section including information relating to a video clip for a particular camera.

However Foster does teach the payload section including information relating to a video clip for a particular camera. **(Foster discloses: other information from the deconstructed data from a particular camera data frame, such as a type of data (eg. Video data), column 13 line 5-16. Foster states many such data communication processing techniques include various common steps, such as deconstructing received data frames or packets based on the network protocols**

**used to encode the data in order to extract various relevant header and payload information, Column 3 line 8-13, column 13 line 5-16, figures 2A and 2B).**

It would be obvious to a person of ordinary skill in the art at the time of the invention to modify the message logging for reliable multicasting across a routing network of Banavar to include a method of routing packets which include video data as taught by Foster. One of ordinary skill in the art would have been motivated to make this modification in order to have the messaging technique of Banavar to include Foster's integrated analysis of incoming data transmission because it provides a more dynamic way of transmitting information and data. *Foster discloses in addition to inter-vendor problems that exist in current EDN architectures, it is often difficult for even a single device such as an edge switch to forward data to appropriate destinations in a secure manner, particularly with any guarantees as to the Quality Of Service ("QOS") of the transmissions. For example, current architectures typically assign one or more network addresses to each node in a network (e.g., logical network addresses such as IP addresses and/or physical network addresses such as Media Access Control ("MAC") addresses), and network routing and switching devices use the network addresses of a destination node to route transmissions of data from a source node to that destination node.; Page 3 lines 31-42.*

Therefore, it would be obvious to combine Banavar with Foster to arrive to limitations in 22.

Regarding claim 23, Banavar in view of Foster taught the method of claim 22, as described above. Foster further teaches wherein the inspect module includes a module

for determining whether information in the payload section matches content predicate information in a structure associating the content predicate information with corresponding network destinations or corresponding rules governing in-router processing. **(Foster discloses in some embodiments, content type classification content type classification information from step 420 and /or content analysis information from step 425 may be used to assist in the destination selection process, such as to select a destination optimized for the specific content of the received data frame or based on information determined during the analysis of the content. Column 18 line 20)**

Regarding claim 24, Banavar in view of Foster taught the method of claim 22, as described above. Foster further teaches including a module for performing the inspecting step at a router(fig 1 element 20) in the network core(figure 1 element 35). **(Foster discloses many such data communication processing techniques include various common steps, such as deconstructing received data frames or packets based on the network protocols used to encode the data in order to extract various relevant header and payload information. Column 3 line 8)**

Regarding claim 25, Banavar in view of Foster taught the method of claim 22, as described above. Foster further teaches wherein the inspect module (fig 1 element 120) includes a module for applying a filter to information in the payload section. **(Foster discloses the routine then continues to step to analyze the payload of the data frame for various types of required or prohibited content, and may not in some embodiments use prohibited content, and may in some embodiments use**

**content type classification information from step 420 as part of the analysis. In some embodiments, if prohibited content is detected and/or required content is not present, the content analysis may remove, replace, or add such content. Column 18 line 4)**

Regarding claim 26, Banavar in view of Foster taught the method of claim 25, as described above. Foster further teaches including a module for propagating the filter to a router in the network for use in performing the inspecting. **(Foster discloses for example the content based routing of data communications(e.g. by analyzing data communications at some or all of the layers 4-7 of the ISO networking model, such as to assist n determining appropriate destinations. Column 5 line 12).**

Regarding claim 27, Banavar in view of Foster taught the method of claim 22, as described above. Foster further teaches including a module for programming a router in the network for performing receiving (fig. 4 element 405), inspecting (fig.4 element 445 and 460), and routing steps (fig. 4 element 415).

Regarding claim 28, Banavar in view of Foster taught the method of claim 22, as described above. Foster further teaches wherein the inspect module includes a module for inspecting attributes for use in determining how to route the packet. ***(Foster discloses in some embodiments, if prohibited content is detected and/or required content is not present, the content is detected and/or required a content analysis may remove, replace, or add such content. Column 18 line 9)***

Regarding 31, Banavar teaches an apparatus for routing messages in a network providing alert services, comprising: a receive module for receiving a message having a header section, at least one subject, and at least one attribute, the attribute relating to a video clip from a particular camera; a module for retrieving the subject and the attribute from the message; a module for retrieving a subscription based upon the subject; an apply module for applying the attribute to the subscription in a network core in order to determine how to route the message to a subscriber to information from the particular camera.

Banavar does not explicitly teach the attribute relating to a video clip from a particular camera.

However Foster does teach the attribute relating to a video clip from a particular camera. **(Foster discloses: other information from the deconstructed data from a particular camera data frame, such as a type of data (eg. Video data), column 13 line 5-16. Foster states many such data communication processing techniques include various common steps, such as deconstructing received data frames or packets based on the network protocols used to encode the data in order to extract various relevant header and payload information, Column 3 line 8-13, column 13 line 5-16, figures 2A and 2B).**

It would be obvious to a person of ordinary skill in the art at the time of the invention to modify the message logging for reliable multicasting across a routing

network of Banavar to include a method of routing packets which include video data as taught by Foster. One of ordinary skill in the art would have been motivated to make this modification in order to have the messaging technique of Banavar to include Foster's integrated analysis of incoming data transmission because it provides a more dynamic way of transmitting information and data. *Foster discloses in addition to inter-vendor problems that exist in current EDN architectures, it is often difficult for even a single device such as an edge switch to forward data to appropriate destinations in a secure manner, particularly with any guarantees as to the Quality Of Service ("QOS") of the transmissions. For example, current architectures typically assign one or more network addresses to each node in a network (e.g., logical network addresses such as IP addresses and/or physical network addresses such as Media Access Control ("MAC") addresses), and network routing and switching devices use the network addresses of a destination node to route transmissions of data from a source node to that destination node.; Page 3 lines 31-42.*

Therefore, it would be obvious to combine Banavar with Foster to arrive to limitations in 31.

Regarding claim 32, Banavar in view of Foster taught the apparatus of claim 31, as described above. Banavar further teaches wherein the module for retrieving the subscription includes a module for retrieving a filter corresponding with the subscription.

***(Banavar discloses the present invention achieves reliability of routed messages by saving messages to persistent storage within the router network and retrieving and redelivering the message whenever there is a failure in the network. Publishers and subscribers that need reliability of messages may specify a quality of service parameter, e.g., "uniform delivery". Uniform delivery is provided for ensuring delivery of a message to all active subscribers notwithstanding failure in the network, e.g., the routers, or the links. Special routers in the router network 300 are designated logging nodes or loggers 310 and support the ability to log messages to stable storage. When there is at least one subscriber needing logging, the routing algorithm ensures that messages are routed to a logger. When reliable delivery is required by at least one publisher or subscriber, the routing protocol incorporates message logging in accordance with the principles of the present invention; Column 6 lines 51- Column 7 line 5)***

Regarding claim 33 , Banavar in view of Foster taught the apparatus of claim 31, as described above. Banavar further teaches including a module for selective routing the message if the attribute satisfies the subscription and based on the quality of service guarantee. ***(Banavar discloses again, as used herein, "uniform delivery" comprises a system guarantee that subscribers who have requested uniform delivery receive the message only if all other subscribers requesting uniform delivery also receive the message. Otherwise, the message is not forwarded to***

***any subscriber requesting the uniform delivery. Either every subscriber receives the published message or no subscriber of uniform delivery receives the published message; Column 8 lines 63-Column 9 lines 6 and Column 6line 65-Coumn 7 line 5, Column 8 line 65-Column9 line5)***

Regarding claim 34, Banavar in view of Foster taught the apparatus of claim 31, as described above. Banavar teaches further including a module for discarding the message if the attribute does not satisfy all subscriptions. ***(Banavar discloses again, as used herein, "uniform delivery" comprises a system guarantee that subscribers who have requested uniform delivery receive the message only if all other subscribers requesting uniform delivery also receive the message. Otherwise, the message is not forwarded to any subscriber requesting the uniform delivery. Either every subscriber receives the published message or no subscriber of uniform delivery receives the published message; Column 8 lines 63-Column 9 lines 6)***

Regarding claim 35, Banavar in view of Foster taught the apparatus of claim 31, as described above. Banavar teaches further including: a module for retrieving a plurality of filters corresponding with a plurality of subscriptions; a module for retrieving a plurality of attributes from the message; a module for applying each of the attributes to each of the filters to determine if any of the corresponding subscriptions are satisfied; and a module for selectively routing the message based upon whether any of the

subscriptions are satisfied. ***(Banavar discloses FIG. 7 depicts one embodiment of phase one message routing processing in accordance with the present invention. This processing is implemented at each node of the network. At a given node, a published message is received 700 and recorded into the node's message table 402 (FIG. 4) using the message id and source node information provided with the message 710. The node's content routing computation 404 (FIG. 4) next determines neighboring node routing information which is also stored into the message table 720. Again, this computation is based on data content of the message when employing a routing system such as described in the initially-incorporated patent application. Column 8 lines 44-55 and lines 56-67)***

Regarding claim 36, Banavar in view of Foster teaches the apparatus of claim 31, as described above. Banavar also teaches further including one or more modules for performing the applying at a router in the network core. ***(Banavar discloses In addition to the spanning tree associated with each router, each router has a routing table. The routing table includes an entry for each client computer in the network. Each entry of the routing table associates a client address with the identifier of the network link constituting the next segment on the path in the spanning tree from the router to the client. For a router with d network links, each such link identifier is an integer between 1 and d. For instance, the client having address 101a has a corresponding link identifier of 3 (see FIG. 2); Column 6 line 25-33)***

7. Claims 8, 11, 12, 19, 20, 29, 30, 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banavar (US 7050432), Foster (U.S 7042877), further in view of Sleeckx( 2002/0175995),

Regarding claim 8, Banavar in view of Foster taught the method of claim 1, as described above. Banavar nor Foster explicitly teaches wherein the selectively routing step comprises routing the packet to a digital video surveillance system.

However Sleeckx does teaches the routing the packet to a digital video surveillance system. **(Sleeckx discloses the system includes a digital video recorder or site terminal 10 located a site that is to be surveilled and a viewer or remote terminal. Paragraph 39 line 3; The communications link could also comprise a corporate LAN, WAN, VPN, the telephone system, wireless links or the like. Paragraph 40 line 10).**

It would be obvious to a person of ordinary skill in the art at the time of the invention to modify the message logging for reliable multicasting across a routing network of Banavar, a method of routing packets which include video data as taught by Foster to include a Digital Video Surveillance System which has packets comprised of video data as taught by Sleeckx. One of ordinary skill in the art would have been motivated to make this modification in order to have the video surveillance system to

use the routing technique of Foster because it provides the advantage of preventing unauthorized nodes from sending data to that destination, allow authorized nodes to transmit desired data to such a destination and also provide quality of service, all of which would be achieved in such a modification.

Regarding claim 11, Banavar in view of Foster taught the method of claim 1, as described above. For the same motivation explained in claim 8, Sleeckx does teach the particular camera comprises a digital video recorder and a charge coupled device. (**Sleeckx discloses the invention provides an improved video surveillance system including a remote video recorder for a particular field location which is capable of capturing video information in a digital archive which can be randomly accessed. Paragraph [15] line 1)**

Regarding claim 12, Banavar ,Foster together with Sleeckx taught the method of claim 11, as described above. Foster, as set forth herein above, teaches generating a packet having the header section and payload sections, the payload section including information relating a video clip from a particular camera. **(Sleeckx discloses a digital video recorder generating packets (the input video processor 102 packetizes the video information into a format compatible with the packet switched communications link which is used. Paragraph [46] line 16)**

Regarding claim 19, Banavar in view of Foster taught the method of claim 13, as described above. Ott does not explicity disclose digital Video recorder and a charge coupled device. **(Sleeckx discloses the invention provides an improved video surveillance system including a remote video recorder for a particular field**

**location which is capable of capturing video information in a digital archive which can be randomly accessed. Paragraph [15] line 1)**

Regarding claim 20, Banavar in view of Foster taught the method of claim 19, as described above. Sleeckx further teaches digital video recorder generating the message having the header section, the at least one subject, and the at least one attribute, the attribute relating to a video clip from the particular camera. **(Sleeckx discloses a digital video recorder generating packets (the input video processor 102 packetizes the video information into a format compatible with the packet switched communications link which is used. Paragraph [46] line 16)**

Regarding claim 29 Banavar in view of Foster taught the method according to claim 22, as described above. Based on the same motivation of claim 8, Sleeck teaches disclose a network comprising of a digital video recorders. **(Sleeckx discloses many CCTV systems use multiplexers to combine video signals from several cameras to reduce the number of video recorders and amount of video tape needed for a particular surveilled location. Paragraph [5] line 1.)**

Regarding claim 30, Banavar in view of Foster taught the apparatus of claim 22, Based on the same motivation as in claim 8, Sleeckx teaches wherein the particular camera comprises a digital video recorder and a charge coupled device. **(Sleeckx discloses the invention provides an improved video surveillance system including a remote video recorder for a particular field location which is capable of capturing video information in a digital archive which can be randomly accessed. Paragraph [15] line 1)**

Regarding claim 37 Banavar in view of Foster taught the apparatus of claim 31, further comprises wherein the apparatus is located in a network comprising digital video recorders. Based on the same motivation as claim 8, Sleeckx teaches a network comprising of digital video recorders. ***(Sleeckx discloses many CCTV systems use multiplexers to combine video signals from several cameras to reduce the number of video recorders and amount of video tape needed for a particular surveilled location, Paragraph [5] line 1. It would be obvious to a person of ordinary skill in the art at the time of the invention to modify a method for routing packets which include video data(as specified by Foster) to include digital video recorders which transmit or route video data in a video surveillance network(specified by Sleeckx).***

Regarding claim 38, Banavar in view of Foster taught the apparatus of claim 31, as described above. Based on the same motivation as in claim 8, Sleeckx teaches comprising of wherein the particular camera comprises a digital video recorder and a charge coupled device. **(Sleeckx discloses the invention provides an improved video surveillance system including a remote video recorder for a particular field location which is capable of capturing video information in a digital archive which can be randomly accessed. Paragraph [15] line 1)**

Regarding claim 39 Banavar and Foster, and based on the same motivation as claim 8 Sleeckx teaches a system for routing packets in a network for use in providing alert services, comprising: a plurality of digital video. cameras; **(Sleeckx discloses typically, one or more video cameras are used to generate video signals from the areas**

**which are surveilled. Paragraph [4] line 3**), wherein the digital video cameras produce a digital video output (**Sleeckx discloses many CCTV systems use multiplexers to combine video signals from several cameras to reduce the number of particular surveilled location. A typical multiplexer used is a quad multiplexer which combines four video signals into a single video signal. Paragraph [05] line 1)** a local area network (LAN)**(fig. 1 element 14)** connecting the digital video cameras**(fig 1 element 16)**; a publisher agent**(fig 1 element 18)**, connected to the LAN**(fig 1element 14),** that publishes the digital video output; a publish-subscribe network**(fig 1),** connected to the publisher agent; wherein the publish-subscribe network comprises a plurality of intelligent routers and wherein each of the intelligent router includes: a receive module for receiving a packet having a header section and a payload section, the payload section including information relating to digital video cameras, the information including a subject and an attribute, an inspect module for inspecting the payload section of the packet in a network core for use in determining how to route the packet to subscribers to information from the digital video camera, and a route module for selectively routing the packet based upon the inspecting, wherein the inspect module and the route module operate to retrieve a subscription and the attribute match; ***(Banavar discloses content-based publish/subscribe systems improve the degree of decoupling between publishers and subscribers. In content-based publish/subscribe systems, subscriptions are specified in terms of predicates on the posted data, rather than in terms of subject identifiers supplied by the publisher. One example of a content-based***

***publish/subscribe system is described in co-pending U.S. patent application Ser. No. 08/975,280, entitled "Method And System For Matching Consumers To Events," Astley et al., which is hereby incorporated herein by reference in its entirety. The examples described herein are with reference to a content-based subscription system. However, these are only examples. The present invention can be employed with other types of systems without departing from the spirit of the present invention. In one embodiment of the invention, each router 108 of network 100 (FIG. 1) has associated therewith a spanning tree, which lays out the best path (according to some criterion, such as latency) from the router to each client 101. In this embodiment, it is assumed that routers agree on a common criterion for measuring distance between nodes in the network. There may in fact be multiple spanning trees. For example, alternative spanning trees may specify either backup routes, or peak load routes. Herein, it is assumed that one spanning tree is in effect for the routing of any particular message; Column 5 lines 49-Column 6 line 8)*** and, a digital video surveillance system that receives ~~receive~~ the published digital video output via the publish-subscribe network. **(Sleeckx discloses similarly, when a user requests a specific archived video information file in block 122, the media server 128 through the web server 126 receives the request, retrieves the desired video file from archive disk 108, and servers the archived video information from line 132 to the user's address through the network interface output 134. Paragraph 51 line 17)**

Regarding claim 40, Banavar , Foster in view of Sleeckx taught the system of claim 39, as described above. Sleeckx further teaches comprising a subscriber agent (fig 1 element 12), connected to the publish-subscribe network, that subscribes to the digital video output and pushes the subscribed digital video output to the DVSS. ***(Sleeckx discloses In response to a request from the remote terminal 12 through interface 24, the output processors 16, 21 will cause an information stream to be transmitted across the communication link. Paragraph [42] line 14)***

**Response to Remarks**

. 8. Applicant's arguments with respect to claims 1-40 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald Smarth whose telephone number is (571)270-1923. The examiner can normally be reached on Monday-Friday(7:30am-5:00pm)est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on (571)272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/G. S./
Examiner, Art Unit 2146

/Jeffrey Pwu/
Supervisory Patent Examiner, Art Unit 2146